

the functions of both servers 28, 29.

The many features and advantages of the present invention are apparent from the detailed specification and thus, it is intended by the appended claims to cover all such features and advantages of the described system and methods which follow in the true spirit and scope of the invention. Further, since numerous modifications and changes will readily occur to those of ordinary skill in the art, it is not desired to limit the invention to the exact construction and operation illustrated and described. Accordingly, all suitable modifications and equivalents may be resorted to as falling within the spirit and scope of the invention.

### Claims

- Sub A1
1. A method comprising the steps of:
    - a) generating a display on a user interface of a client device, the display including a document display portion, an index field portion, and a control portion, the document display portion including a display of document data, the index field portion permitting index data to be input to the user interface in association with the document data, and the control portion including at least one control element for generating a start scan signal to initiate scanning of the document with the scanner to generate the document data and a send data signal to transmit the document data with the index data to a server.
  - Sub B7 2. A method as claimed in claim 1, wherein the control element includes a control element used to alternately generate the start scan signal and the send data signal with respective successive activations of the control element.
  3. A method as claimed in claim 2, wherein the control element includes at least one control element activatable to adjust the scale of the display of the document data.
  4. A method as claimed in claim 3, wherein the control element is activatable to increase the scale of the display of the document data ("zoom in").
  5. A method as claimed in claim 3, wherein the control element is activatable to decrease the scale of the document data ("zoom out").
  6. A method as claimed in claim 3, wherein the control element is activatable to scale the document data to fit within the document display portion of the user interface.

Sub B' 7

7. A method as claimed in claim 3, wherein the control element is activatable to scale the document data for display in the document display portion to the same scale as the scanned document.

8. A method as claimed in claim 3, wherein the control element includes a control element to select document data from among a plurality of scanned documents for display on the document display portion of the display.

Sub A2

9. A method comprising the steps of:

a) generating a start scan signal at a user interface of a client device, the user interface including a web browser;

b) transmitting the start scan signal from the client device to a scanner using a control element defined in a hypertext mark-up language (HTML) document displayed on the web browser;

c) receiving the start scan signal at the scanner; and

d) scanning a document with the scanner to generate document data, in response to the start scan signal received in said step (c).

Sub C 2

10. A method as claimed in claim 9, wherein said step (a) is performed by depressing and releasing a control element of the user interface of the client device using a mouse.

Sub B 2

11. A method as claimed in claim 9, further comprising the steps of:

e) transmitting the document data from the scanner to the client device;

f) receiving the document data at the client device; and

g) generating a display including the scanned document on the user interface of the client device, based on the document data received in said step (f).

12. A method as claimed in claim 11, further comprising the step of:

h) adjusting the display of the scanned document via the user interface.

13. A method as claimed in claim 12, wherein the adjusting of said step (h) includes increasing the scale of the display of the scanned document ("zooming in") on the user interface.

Sub B<sup>2</sup> 7

14. A method as claimed in claim 12, wherein the adjusting of said step (h) includes decreasing the scale of the display of the scanned document ("zooming out") on the user interface.

15. A method as claimed in claim 12, wherein the adjusting of said step (h) includes scaling the display of the scanned document to fit within the document display portion of the display of the user interface of the client device.

16. A method as claimed in claim 12, wherein the adjusting of said step (h) includes generating the display of the scanned document on the user interface of the client device with the same scale as the scanned document.

17. A method as claimed in claim 12, wherein the display is a hypertext mark-up language (HTML) document and the user interface is a web browser.

Sub B<sup>3</sup> 7

18. A method as claimed in claim 12, further comprising the step of:  
h) generating a multiscan mode signal at a user interface of the client device, said steps (d) - (f) repeatedly performed to generate document data for a plurality of documents, based on the multimode scan signal.

19. A method as claimed in claim 18, further comprising the steps of:  
i) generating a selection signal at the client device indicating at least one of the first, last, next and previous scanned documents for display; and  
j) displaying the document data for one of the scanned documents, based on the selection signal generated in said step (i).

Sub A3

20. A method as claimed in claim 12, further comprising the steps of:  
h) inputting predetermined index data into the user interface of the client device;  
i) generating a send data signal at the user interface of the client device;  
j) transmitting the document data and index data from the client device to the server in response to the send data signal generated in said step (i);  
k) receiving the document data and index data at the server; and  
l) storing the document data in association with the index data in a database of a data storage unit.

Sub C 7  
21. A method as claimed in claim 20, wherein the index data includes predetermined identification data to identify the document.

22. A method as claimed in claim 20, wherein the document data and the index data are transmitted between the server and client device in hypertext transfer protocol (HTTP) format.

Sub B 4  
23. A method as claimed in claim 20, wherein the start scan signal and the send data signal are input by a user via a common control element of the user interface that toggles between a first scan mode for the performance of said step (a) and a second send mode for the performance of said step (i).

24. A method as claimed in claim 20, wherein the start scan signal is input by a user via a first control element of the user interface for a first scan mode in the performance of said step (a) the send data signal is input by a user via a second control element of the user interface in the performance of said step (i).

25. A method as claimed in claim 9, further comprising the step of:  
e) generating a display of the scanned document on the user interface via the client device, based on the document data.

26. A method as claimed in claim 9, further comprising the steps of:  
e) transmitting the document data from the scanner to a server.

Sub A 4  
27. A method comprising the steps of:  
a) generating a start scan signal at a user interface of a client device;  
b) transmitting the start scan signal from the client device to a scanner;  
c) receiving the start scan signal at the scanner;  
d) scanning a document with the scanner to generate document data, in response to the start scan signal received in said step (c);  
e) transmitting the document data from the scanner to the client device;  
f) receiving the document data at the client device;  
g) generating a display including the scanned document on the user interface of the client device, based on the document data received in said step (f);  
h) inputting predetermined index data into the user interface of the client device;  
i) generating a send data signal at the user interface of the client device;

j) transmitting the document data and index data from the client device to the server in response to the send data signal generated in said step (i);  
k) receiving the document data and index data at the server; and  
l) storing the document data in association with the index data in a database of a data storage unit.

28. A method as claimed in claim 27, wherein the display is generated in said step (g) based on an hypertext mark-up language (HTML) document.

Sub A5  
29. A method as claimed in claim 27, further comprising the step of:

k) adjusting the display of the scanned document via the user interface.

30. A method as claimed in claim 29, wherein the adjusting of said step (k) includes increasing the scale of the display of the scanned document ("zooming in") on the user interface.

31. A method as claimed in claim 29, wherein the adjusting of said step (k) includes decreasing the scale of the display of the scanned document ("zooming out") on the user interface.

32. A method as claimed in claim 29, wherein the adjusting of said step (k) includes scaling the display of the scanned document to fit within the document display portion of the display of the user interface of the client device.

33. A method as claimed in claim 29, wherein the adjusting of said step (k) includes generating the display of the scanned document on the user interface of the client device with the same scale as the scanned document.

34. A method as claimed in claim 29, wherein the user interface is a web browser.

Sub A6  
35. A method as claimed in claim 29, further comprising the step of:

k) generating a multiscan mode signal at a user interface of the client device, said steps (d) - (f) repeatedly performed to generate document data for a plurality of documents, based on the multimode scan signal.

36. A method as claimed in claim 29, further comprising the steps of:

l) generating a selection signal at the client device indicating at least one of the first, last, next and previous scanned documents for display; and

m) displaying the document data for one of the scanned documents, based on the selection signal generated in said step (i).

37. A method as claimed in claim 29, wherein the index data includes predetermined identification data to identify the document.

38. A method as claimed in claim 29, wherein the document data and the index data are transmitted in said step (j) between the server and client device in hypertext transfer protocol (HTTP) format.

39. A method as claimed in claim 29, wherein the start scan signal and the send data signal are input by a user via a common control element of the user interface that toggles between a first scan mode for the performance of said step (a) and a second send mode for the performance of said step (i).

40. A method as claimed in claim 29, wherein the start scan signal is input by a user via a first control element of the user interface for a first scan mode in the performance of said step (a) the send data signal is input by a user via a second control element of the user interface in the performance of said step (i).

41. A system for use with at least one document, the system comprising:

a client device including

a processor;

a memory coupled to the processor;

an input device coupled to the processor; and

a display unit coupled processor;

a scanner coupled to the processor; and

at least one server coupled to the processor,

the processor operating under a predetermined control program stored in the memory to generate a display on the display unit, the display including a document display portion, an index field portion, and a control portion, the document display portion displaying document data generated by scanning the document with the scanner, the index field portion permitting index

data to be input via the input device for association with the document data, and a control portion including at least one control element for use in generating at least a start scan signal with the input device to initiate scanning of the document with the scanner and for use in generating a send data signal with the input device to transmit the document data with the index data to the server.

Sub C<sup>2</sup> 7

42. A system as claimed in claim 41, wherein the control element alternates between generating the start scan signal and the send data signal between successive activations of the control element with the input device.

43. A system as claimed in claim 41, wherein the control element can be used with the input device to adjust the scale of the display of the document data.

44. A system as claimed in claim 41, wherein the control element can be used with the input device to increase the scale of the display of the document data ("zoom in").

45. A system as claimed in claim 41, wherein the control element can be used with the input device to decrease the scale of the display of the document data ("zoom out").

46. A system as claimed in claim 41, wherein the control element can be used with the input device to scale the document data to fit within the document display portion of the user interface.

47. A system as claimed in claim 41, wherein the control element can be used with the input device to scale the document data for display in the document display portion to the same scale as the scanned document.

48. A system as claimed in claim 41, wherein the control element can be used with the input device to select document data from among a plurality of scanned documents for display on the document display portion of the display.

Sub B<sup>4</sup> 7

49. A system as claimed in claim 41, wherein the server receives document data and index data from the server, the system further comprising:

a database storage unit coupled to the server, for storing the index data in association with the document data from the processor.

Sub A8  
50. A system used to scan a document, the system coupled to a network, the system comprising:

- a client device;
- a scanner coupled to the client device;
- a server coupled to the client device via the network; and
- a database storage unit coupled to the server,

the client device receiving document data generated by the scanner by scanning a document, the client device having a user interface capable of generating a display including a document display portion, an index field portion, and a control portion, the document display portion displaying document data generated by scanning the document with the scanner, the index field portion permitting index data to be input via an input device of the client device for association with the document data, and a control portion including at least one control element for use in generating at least a start scan signal with the input device to initiate scanning of the document with the scanner and for use in generating a send data signal with the input device to transmit the document data with the index data to the server, the server storing the document data and index data in the database storage unit.

Sub C27  
51. A system as claimed in claim 50, wherein the network includes an internetwork.

52. A system as claimed in claim 50, wherein the client device includes a personal computer.

53. A system as claimed in claim 50, wherein the user interface includes a web browser in which the document data is displayed.

54. A system as claimed in claim 50, wherein the document data is displayed on the user interface of the client device in a hypertext mark-up language (HTML) document.

Sub A9  
55. A system coupled to a network, the system operated by at least one user, the system comprising:

a plurality of subsystems coupled to the network, the subsystems having respective client devices capable of displaying document data thereon, at least one of the subsystems including a scanner coupled to a respective client device, the scanner generating